

COMPENSATORY MITIGATION

I. INTRODUCTION

The Clean Water Act (Section 404(b)(1) Guidelines) requires that no discharge of fill material be permitted unless appropriate and practicable steps have been taken that will minimize potential adverse impacts of the discharge on the aquatic ecosystem.

Mitigation is an action intended to reduce the effect of a specific activity. Mitigation includes: a) avoiding the impact altogether by not taking a certain action or parts of an action; b) minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or taking affirmative steps to avoid or reduce impacts; c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; e) compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or f) monitoring the impact and taking appropriate corrective measures (40 CFR § 1508.20 or WAC 197-11-768 of SEPA).

This guidance identifies the procedure for developing compensatory mitigation for unavoidable impacts to aquatic resources (see definitions). It includes mitigation categories (c) and (e) outlined in the previous paragraph. Compensatory mitigation is the replacement of functions and values to the extent practical. As clarified in the “Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines” (February 6, 1990), project sponsors must take a sequential approach to mitigation; first, avoid aquatic impacts, then minimize impacts (see Alternatives Analysis/Aquatic Resource Avoidance in Appendix E of the Agreement). Once the project has been evaluated under this process it will then be possible to explore other forms of mitigation.

II. PROJECT SCOPING AND BUDGETING STAGE

At this phase, the project sponsor needs to describe proposed mitigation, including the expected functions and values anticipated to compensate for unavoidable impacts. Mitigation cost estimates must be incorporated in the various alternatives being considered.

Where indicated appropriate by signatory agencies, programs using a common funding source may be able to develop a mitigation bank for anticipated compensation commitments for several projects.

III. PROJECT DEVELOPMENT STAGE

When the preferred alternative is known and the signatory agencies have concurred, the project sponsor needs to develop a compensatory mitigation plan, including an initial mitigation plan, detailed mitigation plan, and final mitigation plan. The detailed mitigation plan will be developed and included in the final EIS. The detailed mitigation plan becomes the final mitigation plan when comments from agencies and the public are incorporated into the plan.

A. When the preferred alternative is known - After addressing all reasonable efforts to avoid and minimize impacts, the remaining unavoidable impacts can be mitigated by rectifying and/or compensating impacts to the affected environment.

1. Initial Mitigation Plan - The initial mitigation plan is a preliminary document that discusses anticipated or known unavoidable impacts to aquatic resources, and conceptual plans for compensatory mitigation. The focus of the initial mitigation plan will be to identify in general terms what will be considered adequate mitigation for the proposed project. It will be used as guidance in developing the detailed mitigation plan. The initial mitigation plan shall be completed for inclusion with the Draft EIS (DEIS) if the preferred alternative is known. If the preferred alternative is not known at the DEIS stage, the initial mitigation plan shall be included in the preliminary 404 application.

The initial mitigation plan includes a preliminary investigation of candidate mitigation sites. The initial mitigation plan information can be obtained by site visits, cursory investigations, record searches of existing databases, and by referencing existing plans and land use documents. The purpose is to determine if there are suitable sites to support the mitigation activity being proposed.

The initial mitigation plan will:

- a. Identify unavoidable impacts to aquatic resources. Descriptions should include:
 - (1) General wetland descriptions including vegetation communities, hydrology sources, landscape/watershed setting, and functions and values;
 - (2) Summary table, which shall include the following for each wetland:
 - (a) Wetland Identification numbers (keyed to map)

- (b) Cowardin classification (USFWS)
 - (c) Washington Department of Ecology (WDOE) categories
 - (d) Hectares (acres) impacted
- b. Establish goals and develop objectives. Determine scope of mitigation project:
 - (1) WDOE category(ies) to be achieved
 - (2) Functions and values to be created or enhanced
 - (3) Vegetation (community types, suggested species)
 - (4) Approximate amount of creation, restoration, enhancement, or preservation in hectares (acres).
- c. Identify the timing of mitigation in relation to the proposed transportation project.
- d. Identify that the site will be monitored to ensure its success and that it will be preserved in perpetuity.
- e. Describe general landscape/watershed setting of potential mitigation sites. These sites can be described separately or grouped and discussed in general terms. Specific sites shall not be identified in this document. The description should include general information on:
 - (1) Past, present, and future land uses of candidate sites
 - (2) Surrounding land uses
 - (3) Landscape position
 - (4) Existing vegetation communities
 - (5) Soils
 - (6) Water resources on or near the site(s)
 - (7) Proximity to sensitive or priority habitat areas

Collection of the preceding information will lead to a conclusion as to whether the site(s) possesses favorable characteristics that would make a successful mitigation likely.

2. Detailed Mitigation Plan

The detailed mitigation plan shall be included in the FEIS. The detailed mitigation plan includes specific information about the mitigation that further elaborates upon the ability to successfully execute the mitigation. This plan also serves to identify in specific terms the extent and nature of the mitigation and should include:

- a. A copy of the project wetland/biology report

- b. Project description and setting
- c. Summary of wetland impacts
 - (1) Wetland descriptions
 - (2) Hectares (acres) of impact
 - (3) Plant communities and habitats
 - (4) Cowardin classification and WDOE ratings
 - (5) Wetland functions and values impacted
- d. Proposed Compensatory Mitigation
 - (1) Table of mitigation ratios showing required and actual acreage of creation, restoration, enhancement and preservation
 - (2) General Goals, including functions to be created, enhanced, restored, or preserved
 - (3) Eventual Ecology Category rating to be achieved by the compensatory wetland
- e. Pre-construction description of mitigation site(s)
 - (1) Location
 - (2) Land use - past and present uses on and adjacent to site
 - (3) Ecological setting
 - (4) Existing vegetation, including problematic species
 - (5) Wildlife use
 - (6) Soils
 - (7) Water resources - streams, wetlands, and groundwater data if applicable
- f. Mitigation Design
 - (1) Hydrology source(s)
 - (2) Grading plan
 - (3) Soil preparation
 - (4) Planting plan (wetland and buffer areas)
 - (a) Community types
 - (b) Species list for each community
 - (5) Construction and planting schedules
- g. Mitigation Success Criteria
 - Objectives and standards of success for each objective

h. Monitoring Plan

- (1) Monitoring schedule
- (2) Summary of methods

i. Contingency plans

j. Maintenance of mitigation site and mechanism for protecting in perpetuity

All permitting agencies will receive, and the final 404 application to the COE will include, the detailed mitigation plan for their review. If a draft 404 application is submitted, it shall include the wetland inventory report and initial mitigation plan.

B. Final Environmental Document Development

The final document needs to carry forward the information contained in the previous environmental document. The COE and permitting agencies will review the detailed mitigation plan as part of their normal review at this stage. Before approval of the final environmental document, the signatory agencies will provide concurrence on the detailed mitigation plan and the adequacy of the schedule.

C. Final Design - Final Wetland Mitigation Plan

The final wetland mitigation plan is completed after the detailed mitigation plan has been circulated to the agencies. It incorporates comments from agencies and the public (and commitments made in the FEIS). The final wetland mitigation plan is the document of record for the section 404 permit.

The final wetland mitigation plan must be approved by Ecology, WDFW, and the COE.

IV. ADDITIONAL INFORMATIONAL RESOURCES

Hammer, D. A. 1992. Creating Freshwater Wetlands. Lewis Publishers, Boca Raton. 298p.

"Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines," February 6, 1990.

Memorandum to the Field between the Environmental Protection Agency and the U. S. Army Corps of Engineers, dated August 23, 1993: "Establishment and Use of Wetland Mitigation Banks in the Clean Water Act Section 404 Regulatory Program."

Working Agreement between The Seattle District, Corps of Engineers, the Washington Division, Federal Highway Administration, and the Washington State Department of Transportation: "Appendix D, WSDOT Guidelines for Wetland Mitigation Plans," July 26, 1993.

Implementing Agreement between the Washington State Department of Transportation and the Washington State Department of Ecology: "Concerning Wetlands Protection & Management," July 1, 1993.

Memorandum of Agreement between Washington State Departments of Ecology, Fish and Wildlife, Transportation, U. S. Army Corps of Engineers, U. S. Environmental Protection Agency, U. S. Fish and Wildlife Service, National Marine Fisheries Service, and the Federal Highway Administration: "Wetland Compensation Bank Program," February 15, 1994.